

Amendments to the Claims:

All amendments and cancellations to the claims are made without prejudice or disclaimer. This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-107. (cancelled)

108. (new) A method for gathering genetic information, the method comprising:

- a) determining the identity of at least one nucleotide in the SIRT1 locus on human chromosome 10q of a subject; and
- b) creating a record which includes information about the identity of the nucleotide and information relating to an Alzheimer's Disease (AD)-related parameter of the subject, wherein the AD-related parameter is other than the genotype of a nucleotide in the 10q AD6 region.

109. (new) The method of claim 108 wherein the determining comprises evaluating a sample comprising human genetic material from the subject.

110. (new) A method comprising:

- a) evaluating a parameter of a SIRT1 molecule from a mammalian subject;
- b) evaluating an Alzheimer's Disease (AD)-related parameter of the subject wherein the AD-related parameter is other than a parameter of a SIRT1 molecule; and
- c) recording information about the SIRT1 parameter and information about the AD-related parameter, wherein the information about the parameter and information about the phenotypic trait are associated with each other in the database.

111. (new) The method of claim 110 wherein the AD-related parameter is a phenotypic trait of the subject.

112. (new) The method of claim 110 wherein the SIRT1 molecule is a polypeptide and the SIRT1 parameter comprises information about a SIRT1 polypeptide.

113. (new) The method of claim 110 wherein the SIRT1 molecule is a nucleic acid and the SIRT1 parameter comprises information about identity of a nucleotide in the SIRT1 gene.

114. (new) The method of claim 113, further comprising:

c) comparing the SIRT1 parameter to reference information, e.g., information about a corresponding nucleotide from a reference sequence.

115. (new) The method of claim 114, wherein the reference sequence is from a reference subject who has attained old age.

116. (new) The method of claim 114, wherein the reference subject has attained at least 85 years of age.

117. (new) The method of claim 114, wherein the reference subject did not exhibit AD.

118. (new) The method of claim 114, wherein the reference subject was cognitively intact.

119. (new) The method of claim 114, wherein the reference sequence is from a reference subject that has AD.

120. (new) The method of claim 119, wherein the reference sequence is from a reference subject that has late-onset AD (LOAD).

121. (new) The method of claim 113, wherein the evaluating of a SIRT1 parameter includes evaluating a nucleotide position in the SIRT1 locus on both chromosomes of the subject.

122. (new) A method for evaluating a disorder, the method comprising:  
a) identifying a plurality of human individuals characterized by a disorder or having a genetic relationship with a subject characterized by the disorder;  
b) comparing distribution of a plurality of genetic markers among the subjects of the first plurality to distribution of markers of the plurality of genetic markers among subjects of a second plurality of human subjects, wherein the human subjects of the second plurality have attained at least 90 years of age.

123. (new) The method of claim 122, further comprising evaluating a measure of linkage disequilibrium.

124. (new) The method of claim 122, wherein each subject of the first plurality is suffering or at risk for an age-associated disorder.

125. (amended) The method of claim 124, wherein the age-associated disorder is one of the following disorders: cancer; skeletal muscle atrophy; adult-onset diabetes; diabetic nephropathy, neuropathy; obesity; bone resorption; age-related macular degeneration, ALS, Bell's Palsy, atherosclerosis, cardiac diseases, chronic renal failure, type 2 diabetes, ulceration, cataract, presbiopia, glomerulonephritis, Guillan-Barre syndrome, hemorrhagic stroke, rheumatoid arthritis, inflammatory bowel disease, multiple sclerosis, SLE, Crohn's disease, osteoarthritis, Parkinson's disease, pneumonia, and urinary incontinence.

126. (new) The method of claim 122, wherein the human subjects of the second plurality are cognitively intact at the age of 85.

127. (new) The method of claim 122, wherein the human subjects of the second plurality are free of a symptom or diagnosis of the disorder.